REMARKS

Claims 1-7 are pending in the current application. Claims 1, 6 and 7 are in independent form. In view of the above amendments and the following remarks, favorable reconsideration and allowance of the present application is respectfully requested.

Initially, Applicant appreciates the Examiner's indication that the references submitted in the Information Disclosure Statements filed on April 20, 2010 and June 11, 2010 have been considered.

I. SPECIFICATION AMENDMENTS

By the present Amendment, the Specification is amended. In the present application, Applicant's priority claim to International Patent Application No. PCT/SE03/01892, U.S. Provisional Application No. 60/430,364 and Sweden Application No. 0203569-9 was included in the Declaration filed on December 19, 2006, which was filed within the time period set forth in 37 C.F.R. § 1.78(a). Further, the information concerning the priority claim was recognized by the USPTO as shown by its inclusion in the Official Filing Receipt mailed March 8, 2007 (copy enclosed). Applicant now submits the present Amendment to amend the specification to include specific reference to these priority claims.

MPEP § 201.11.III.D states (emphasis added):

> If an applicant includes a benefit claim in the application but not in the manner specified by 37 C.F.R. § 1.78(a) (e.g., if the claim is included in an oath or declaration or the application transmittal letter) within the time period set forth in 37 C.F.R. § 1.78(a), the Office will not require a petition under 37 C.F.R. § 1.78(a) and the surcharge under 37 C.F.R. § 1.17(t) to correct the claim if the information concerning the claim was recognized by the Office as shown by its inclusion on the filing receipt.

Therefore, according to MPEP § 201.11.III.D (recited above), a petition under 37 C.F.R. § 1.78(a) and surcharge under 37 C.F.R. § 1.17(t) are not required.

Applicant requests entry of this amendment to the specification and request proper recognition of this priority claim to International Patent Application No. PCT/SE03/01892, U.S. Provisional Application No. 60/430,364 and Sweden Application No. 0203569-9.

II. CITED ART REJECTIONS

(A) Claims 1-5 and 7 stand rejected under 35 U.S.C. §102(e) as being anticipated by Anderson et al. (hereinafter "Anderson"), U.S. Publication No. 2002/0168618. Applicant respectfully traverses this rejection.

i. INDEPENDENT CLAIM 1

Independent claim 1 is directed to an interventional procedure simulation system wherein (*inter alia*) "the control unit is configured to simulate said instrument with respect to a set value representing a stiffness of said vessel, a rest diameter of said self expanding tool, an initial inner diameter of said vessel and a spring constant for said tool." Applicant submits that Anderson fails to explicitly teach, or otherwise suggest, the above features recited in independent claim 1.

The rejection states that Anderson discloses a control unit "...configured to simulate said instrument with respect to a set value (paragraphs 0023 & 0037: physiological parameters and alter parameters) representing a stiffness of said vessel, a rest diameter of said self expanding tool, an initial inner diameter of said vessel and spring constant for said tool." Action, p. 2.

However, the set value representing the claimed combination of "a stiffness of said vessel, a rest diameter of said self expanding tool, an initial inner diameter of

said vessel and a spring constant for said tool" is not taught or suggested by Anderson.

In particular, paragraph [0023] of Anderson (as relied upon by the Examiner) states that,

> The system can be adapted for use by multiple users, for example, as part of a training environment. In one aspect, the system comprises a monitoring station comprising a second user device connectable to the network and comprising **a second display interface for enabling a second user to monitor the movement of the medical device within the simulated body cavity or lumen**. Preferably, the second display interface displays selectable options (e.g., a drop down menu, action buttons, check buttons, radio buttons, dialog boxes, command lines and the like), enabling the second user **to select or change one or more anatomical and/or physiological parameters of the simulated body cavity or lumen**. Selection of a selectable option **causes the three-dimensional image of the simulated body cavity or lumen displayed to the first user to change to reflect the changed anatomical and/or physiological parameters selected by the second user**.
>
> Emphasis added.

Thus, paragraph [0023] states the system includes a second display interface that allows a second user to (i) monitor the movement of the medical device within the simulated body cavity or lumen, and (ii) to select or change one or more anatomical and/or physiological parameters of the simulated body cavity or lumen wherein such selections or changes cause the 3D image of the lumen display to the first user to change.

Paragraph [0023] of Anderson does not teach, or suggest, that the system is configured to simulate the medical device with respect to a set value representing parameters of the lumen and the tool. Thus, paragraph [0023] of Anderson does not teach, or suggest, that the system is "configured to simulate said instrument with

respect to a set value representing a stiffness of said vessel, a rest diameter of said self expanding tool, an initial inner diameter of said vessel and a spring constant for said tool" as recited in independent claim 1.

Paragraph [0037] of Anderson states that,

> A second user also can interact with the first user by using the monitoring station described above. For example, the second user can display a particular image selected by the second user from the database on the first user's display interface. The second user can alter parameters of the simulation displayed to the first user, for example, as part of a training exercise, to document the progress of one or more first users, and/or to introduce procedural variables that can be used to test or evaluate the response and decision-making abilities of one or more first users.

Paragraph [0037] of Anderson does not teach, or suggest, that the system is configured to simulate the medical device with respect to a set value representing "a stiffness of said vessel, a rest diameter of said self expanding tool, an initial inner diameter of said vessel and a spring constant for said tool" as recited in independent claim 1.

Applicant notes that the Examiner states "Anderson et al. does not disclose simulating said at least one instrument with respect to a set value representing a rest diameter of said self expanding tool and a spring constant of said self expanding tool." Action, p. 4.

Absent Applicant's own disclosure, there is no suggestion that the system processor of Anderson is configured to simulate an instrument with respect to a set value representing "a stiffness of said vessel, a rest diameter of said self expanding tool, an initial inner diameter of said vessel and a spring constant for said tool" as recited in independent claim 1.

For at least these reasons, Anderson fails to explicitly teach, or otherwise suggest, an interventional procedure simulation system wherein "the control unit is configured to simulate said instrument with respect to a set value representing a stiffness of said vessel, a rest diameter of said self expanding tool, an initial inner diameter of said vessel and a spring constant for said tool" as recited in independent claim 1.

Accordingly, Applicant respectfully requests that the Examiner reconsider and withdraw the rejection to independent claim 1, and claims 2-5 at least by virtue of their dependency on independent claim 1.

ii. INDEPENDENT CLAIM 7

Independent claim 7 is directed to an interventional procedure simulation system wherein (*inter alia*) "the control unit is configured to simulate said instrument with respect to a set value representing an stiffness of said simulated vessel, a rest diameter of said self-expanding tool, an initial inner diameter of said simulated vessel, and a spring constant for said self-expanding tool." Thus, independent claim 7 is patentable over Andersen for similar reasons as given above with respect to independent claim 1.

As such, Applicant respectfully requests that the Examiner reconsider and withdraw the rejection to independent claim 7.

(B) Claim 6 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Anderson in view of Merril, U.S. Patent No. 6,106,301 and Tarr, U.S. Patent No. 6,191,796 B1. Applicant respectfully traverses the rejection.

Independent claim 6 is directed to a method of simulating an interventional procedure simulation system including (*inter alia*) "simulating said at least one instrument with respect to a set value representing a stiffness of said simulated vessel, a rest diameter of said self expanding tool, an initial inner diameter of said simulated vessel and a spring constant for said self expanding tool." Applicant submits that the combination of Anderson, Merril and Tarr fail to explicitly teach, or otherwise suggest, the above features of independent claim 6.

Firstly, the rejection states that Anderson discloses a method including "...simulating said at least one instrument with respect to a set value (paragraphs 0023 & 0037: physiological parameters and alter parameters) representing a stiffness of said vessel (paragraph 0068), a rest diameter of said self expanding tool, an initial inner diameter of said vessel (paragraphs 0151 & 0193) and spring constant for said tool." Action, p. 4.

However, the set value representing the claimed combination of "a stiffness of said vessel, a rest diameter of said self expanding tool, an initial inner diameter of said vessel and a spring constant for said tool" is not taught or suggested by Anderson.

In particular, as noted above, paragraph [0023] of Anderson (as relied upon by the Examiner) does not teach, or suggest, that the system is configured to simulate the medical device with respect to a set value representing parameters of the lumen and the tool. Thus, paragraph [0023] of Anderson does not teach, or suggest, that the system is "configured to simulate said instrument with respect to a set value representing a stiffness of said vessel, a rest diameter of said self expanding tool, an initial inner diameter of said vessel and a spring constant for said tool" as recited in independent claim 1. And, paragraph [0037] of Anderson does not teach, or suggest, that the system is configured to simulate the medical device with respect to a set

value representing "a stiffness of said vessel, a rest diameter of said self expanding tool, an initial inner diameter of said vessel and a spring constant for said tool" as recited in independent claim 1.

Paragraph [0093] states that,

> The manikin interface can be encased in a housing comprising one or more openings for receiving medical devices, and means for interfacing with tracking unit(s), feedback mechanism(s) and a system processor (described further below). Additional devices such as syringes and balloon inflating devices can be provided as part of the interface, e.g., simulating balloon angioplasty proceedings).

Paragraph [0093] states that device such as syringes and balloon inflating devices can be simulated. Paragraph [0093] does not state that the spring constant of the devices is considered. (Note: The rejection states that "Anderson et al./Merril does not disclose simulating said at least one instrument with respect to a set value representing a spring constant of said self expanding tool." Action, p. 5.) Thus, paragraph [0093] of Anderson does not teach, or suggest, that the system is configured to simulate the medical device with respect to a set value representing "a stiffness of said vessel, a rest diameter of said self expanding tool, an initial inner diameter of said vessel and a spring constant for said tool" as recited in independent claim 1.

Paragraph [0153] states that, "[q]uantitative measures of a pathology can be obtained. For example, a quantity module which is part of the system can be used to measure the size of a blockage (e.g., a plaque)." Thus, paragraph [0153] implies that a lumen having plaque, for example, has a different size.

Paragraph [0153] does not that the system is configured to simulate the medical device with respect to a set value representing parameters of the lumen and the tool. Thus, paragraph [0153] of Anderson does not teach, or suggest, that the

system is configured to simulate the medical device with respect to a set value representing "a stiffness of said vessel, a rest diameter of said self expanding tool, an initial inner diameter of said vessel and a spring constant for said tool" as recited in independent claim 1.

Furthermore, Applicant notes that the Examiner states "Anderson et al. does not disclose simulating said at least one instrument with respect to a set value representing a rest diameter of said self expanding tool and a spring constant of said self expanding tool." Action, p. 4.

Secondly, acknowledging the deficiencies of Anderson, the rejection states that "...Merril teaches simulating said at least one instrument with respect to a set value representing a rest diameter of said self expanding tool (column 9 lines 51-54 & lines 62-66, column 11 lines 29-32, column 12 lines 26-30, column 14 lines 43-46 & lines 52-55)." Action, pp. 4-5.

However, Merril merely teaches that instruments have a diameter. Merril does not teach, or suggest, that the simulation system is configured to simulate the medical device with respect to a set value representing "a stiffness of said vessel, a rest diameter of said self expanding tool, an initial inner diameter of said vessel and a spring constant for said tool" as recited in independent claim 1.

Thirdly, acknowledging the deficiencies of Anderson and Merril, the rejection states that "...Tarr teaches simulating said at least one instrument with respect to a set value representing a spring constant of said self expanding tool (spring constant)." Action, p. 5.

However, Tarr does not teach, or suggest, that the system is configured to simulate the medical device with respect to a set value representing "a stiffness of said vessel, a rest diameter of said self expanding tool, an initial inner diameter of said vessel and a spring constant for said tool" as recited in independent claim 1.

Thus, absent Applicant's own disclosure, there is no suggestion that the system processor of Anderson in combination with Merril and Tarr is configured to simulate an instrument with respect to a set value representing "a stiffness of said vessel, a rest diameter of said self expanding tool, an initial inner diameter of said vessel and a spring constant for said tool" as recited in independent claim 1.

For these reasons, Applicant submits that Anderson in view of Merril and Tarr fails to explicitly teach, or otherwise suggest, a method of simulating an interventional procedure simulation system including "simulating said at least one instrument with respect to a set value representing a stiffness of said simulated vessel, a rest diameter of said self expanding tool, an initial inner diameter of said simulated vessel and a spring constant for said self expanding tool" as recited in independent claim 6.

As such, Applicant respectfully requests that the Examiner reconsider and withdraw the rejection to independent claim 6.

THE REMAINDER OF THIS PAGE HAS INTENTIONALLY BEEN LEFT BLANK

CONCLUSION

Accordingly, in view of the above, reconsideration of the rejections and allowance of each of claims 1-7 in connection with the present application is earnestly solicited.

Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicant hereby petitions for a three (3) month extension of time for filing a reply to the outstanding Office Action and submit the required $550.00 extension fee herewith.

Should there be any matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNESS, DICKEY, & PIERCE, P.L.C.

By _____
John A. Castellano, Reg. No. 35,094

P.O. Box 8910
Reston, Virginia 20195
(703) 668-8000

JAC/CDW:ljs

Attachment: Copy of Official Filing Receipt mailed on March 8, 2007
1089141.1

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPL NO.	FILING OR 371(c) DATE	ART UNIT	FIL FEE REC'D	ATTY.DOCKET NO	TOT CLMS	IND CLMS
10/538,005	12/19/2006	3743	515	4145-000008/US	6	2

CONFIRMATION NO. 6867

30593
HARNESS, DICKEY & PIERCE, P.L.C.
P.O. BOX 8910
RESTON, VA 20195

FILING RECEIPT

OC000000022658553

Date Mailed: 03/08/2007

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please mail to the Commissioner for Patents P.O. Box 1450 Alexandria Va 22313-1450. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).**

Applicant(s)

Jan Grund-Pedersen, Kullavik, SWEDEN;

Power of Attorney: The patent practitioners associated with Customer Number **30593**.

Domestic Priority data as claimed by applicant

This application is a 371 of PCT/SE03/01892 12/03/2003
which claims benefit of 60/430,364 12/03/2002

Foreign Applications

SWEDEN 0203569-9 12/03/2002

If Required, Foreign Filing License Granted: 02/26/2007

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is US10/538,005

Projected Publication Date: 06/07/2007

Non-Publication Request: No

Early Publication Request: No

**** SMALL ENTITY ****

Title

Interventional simulator system

Preliminary Class

128

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at http://www.uspto.gov/web/offices/pac/doc/general/index.html.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, http://www.stopfakes.gov. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

LICENSE FOR FOREIGN FILING UNDER
Title 35, United States Code, Section 184
Title 37, Code of Federal Regulations, 5.11 & 5.15

GRANTED

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).